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# How different is team learning from team creativity? Some boundary crossing empirical evidence

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Teamwork represents a dominant work form in contemporary organisations. They are deployed to solve complex problems and challenging tasks from the belief that *'Together Everyone Achieves More'*. Team learning research has confirmed that interpersonal behaviours such as sharing information, discussing, reasoning etc. are indeed driving forces for team effectiveness (Boon, Raes, Kyndt & Dochy, 2013). Additionally, team creativity is another team process that is proposed to enable teams to solve complex problems and leverage opportunities (Perry-Smith & Shalley, 2003). Both team learning and team creativity are proven to have the ability to increase the adaptive capacity of teams towards their ever-changing context and environment. Conceptually, the literature on both concepts clearly shows some overlap. Paulus and his colleagues for example mention 'sharing of information' and 'building on each other's ideas' as two important team creative behaviours (Paulus, Levine, Brown, Minai & Doboli, 2010). The same behaviours are – e.g. under the names 'construction' and 'co-construction' – in team learning literature defined as important team learning behaviours (Decuyper, Dochy & Van den Bossche, 2010). This overlap has to our knowledge not been clarified yet. Moreover, there is no empirical research that we know of that combines both team creative behaviours and team learning behaviours and attempts to investigate the unique effects of the different behaviours. It is very well possible that the relation between learning and creativity is very complex and hard to disentangle. This paper aims at investigating the relation between team learning behaviours and team creative behaviours in a specific setting, i.e. design teams. In other words we look for an answer to the following research question: 'Are team learning behaviours conceptually and statistically discernable from team creative behaviours?'.

To answer this question, we conducted a literature study to conceptually clarify the relationship between both constructs. Next, an empirical questionnaire study was set up which combines scales for (a) different team learning behaviours and so-called (b) facilitating behaviours with items on (c) team creative behaviours. The specific team behaviours we are investigating are:

construction, co-construction, constructive conflict, task learning and error communication (as team learning behaviours); team activity, team reflexivity and boundary crossing (as facilitating behaviours); and team creative behaviours.

Data were collected from 112 design teams ($N_{individuals} = 540$) working in different organisations. To answer our research question, we followed the basic steps to validate a new questionnaire. Firstly, we divided our dataset into two samples (each teams was equally represented in both samples). An exploratory factor analysis was conducted on the first sample to explore the underlying factorial structure. This structure was then confirmed in our second sample using a CFA.

Results show that the conceptual overlap is indeed represented in our dataset. Even though we included a quite general team creative behaviours scale, we can conclude that team learning and team creative behaviours show some commonalities. Our factor analyses showed that five factors could be distinguished: specific team creative behaviours, error communication, co-construction, team creative potency and sharing or construction. Measurement invariance across male or female team members and members with or without previous experience with teamwork was established.

References

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